DRAFT
"Checklist" Materials for the Purposes of the Kaizen Process and R7 Water Quality Standards Submissions

Discussion of Supporting Documentation to Fulfill the Minimum Regulatory Requirements for Water Quality Standards (WQS) submittals

The following provides the federal regulations for WQS submissions (*in bold*) and a brief discussion of the regulation, including suggestions for supporting documentation that States may include to fulfill the regulatory requirements. Not all the suggested items listed in this document are required to fulfill the regulatory requirements and some items may be more critical than others depending on the content of the WQS submittal; ultimate consideration of items discussed below should be agreed upon during Scoping Meetings. Attachment A, enclosed with this document provides a discussion of considerations for use of selected 40 C.F.R. § 131.10(g) factors.

40 C.F.R. § 131.6 - Minimum requirements for water quality standards submission. The following elements must be included in each State=s water quality standards submitted to EPA for review.

40 C.F.R. § 131.6 summarizes minimum requirements for new/revised WQS submitted by States/Tribes. Other specific requirements for WQS are found throughout 40 C.F.R. Part 131 and WQS submissions must comply with those requirements as relevant.

40 C.F.R. § 131.6(a) Use designations consistent with the provisions of sections 101(a)(2) and 303(c)(2) of the CWA.

Section 101(a)(2) of the CWA establishes as a national goal that wherever attainable, water quality should provide for the protection and propagation of fish, shellfish, and wildlife, and provide for recreation in and on the water. Section 303(c)(2) provides that water quality standards shall be established taking into consideration the use and value of State/Tribal waters for public water supplies, propagation of fish and wildlife, recreation, agriculture, industrial, other purposes, and navigation. When designating uses, federal regulations require, at a minimum, that States specify "appropriate designated uses" (40 C.F.R. § 131.10(a)). When a State designates uses or removes designated uses that do not include those specified in section 101(a)(2), or adopts subcategories of uses specified in section 101(a)(2) that require less stringent criteria, a State must conduct a use attainability analysis. 40 C.F.R. § 131.10(j). Some examples of supporting documentation for use designations might include:

- A detailed literature review, compilation of previously collected data, and an

analysis of such data, information e.g. data compiled from State, Tribal and federal wildlife agencies, academia, or other credible, independent experts, analysis of data from relevant agencies as well as the public, data collected from biosurveys, waterbody surveys and assessments, recreational use surveys, surveys of traditional ecological knowledge (TEK), or other sources of information.

- Maps or other information identifying the distribution of beneficial uses across tribal or state lands.
- Maps or other means of identifying the length of segment to which a particular use designation applies.
- Documentation of consideration of uses in adjacent waters; this may include a discussion of how downstream uses are to be protected if upstream uses are less protective than those downstream.
- Identification and discussion of any and all assumptions used in analyses.

40 C.F.R. § 131.6(b) Methods used and analyses conducted to support water quality standards revisions.

This requirement applies to all WQS provisions, including use designations, criteria, and general policies (i.e., antidegradation, variances, and mixing zones). The following provides some examples of the supporting documentation for different WQS submissions:

Supporting documentation for a designated use change should include as necessary:

- A Use Attainability Analysis (UAA) consistent with the relevant requirements of 40 C.F.R. Part 131, including § 131.10, if the new or revised use is a subcategorization, with less stringent criteria or removal of a use that is specified under the CWA 101(a)(2).
- Review, discussion, and presentation of the relevant historical (since 1975) and present day recreational use of the water by the public and corresponding water quality, if known, if the State or Tribe has added or changed the use to/from primary contact recreation.
- *See* **Attachment A (enclosed): CONSIDERATIONS FOR USE OF SELECTED 131.10(g) FACTORS**.

Supporting documentation for site-specific criteria should include as necessary:

- A complete explanation of how the site-specific criterion complies with the requirements of 40 C.F.R. § 131.11.
- Detailed discussion of the methodology used in the derivation of the value as well as all laboratory testing and results used to develop site-specific criteria.
- Rationale behind the selection of a consumption rate or modification of the relative source contribution for human health criteria.
- Additional information regarding supporting documentation of criteria

derivation/modification are discussed below within the section **40 C.F.R. § 131.6(c) and 40 C.F.R. § 131.11.**

Supporting documentation for general policies (i.e, mixing zone policy, natural conditions provisions) adopted at the discretion of the State into their water quality standards, should include as necessary:

- Clear and detailed implementation procedures to support consistent, reproducible outcomes that are based on information about the receiving water and its uses that meet the requirements of the policy, and that protect uses. This is especially needed for any provisions that rely on site-specific determinations.
- Discussion and analysis of how the policy protects designated uses.

Supporting documentation must be provided to EPA with the submission package. In general, this information must include an explanation of the basis for the modification, as well as the scientific and technical support for the revision(s) (as discussed further below).

40 C.F.R. § 131.6(c) and 40 C.F.R. § 131.11: Water quality criteria sufficient to protect the designated uses.

States/Tribes must submit information that includes a discussion/analysis of the derivation of the criteria where the criteria are not EPA's current recommendations, the scientific basis for the criteria, and a demonstration that the criteria protect the designated use.

If a State/Tribe relies on EPA's CWA section 304(a) recommended criteria documents (or other EPA documents), in most cases, the State/Tribe may reference and rely on the data in these documents and does not need to create duplicative or new material for inclusion in the submission package. However, where site-specific issues arise, or the State/Tribe adopts an approach different from the approach in EPA's criteria document that may change the criteria value, the State/Tribe must provide a scientific rationale for the changes it made as required in 40 C.F.R. § 131.11.

40 C.F.R. § 131.11
(a) *Inclusion of pollutants:* (1) States must adopt those water quality criteria that protect the designated use. Such criteria must be based on sound scientific rationale and must contain sufficient parameters or constituents to protect the designated use. For waters with multiple use designations, the criteria shall support the most sensitive use.
(2) *Toxic pollutants.* States must review water quality data and information on discharges to identify specific water bodies where toxic pollutants may be adversely affecting water quality or the attainment of the designated water use or where the levels of toxic

pollutants are at a level to warrant concern and must adopt criteria for such toxic pollutants applicable to the water body sufficient to protect the designated use. Where a State adopts narrative criteria for toxic pollutants to protect designated uses, the State must provide information identifying the method by which the State intends to regulate point source discharges of toxic pollutants on water quality limited segments based on such narrative criteria. Such information may be included as part of the standards or may be included in documents generated by the State in response to the Water Quality Planning and Management Regulations (40 C.F.R. § part 35).
(b) Form of criteria: In establishing criteria, States should: (1) Establish numerical values based on: (i) 304(a) Guidance; or (ii) 304(a) Guidance modified to reflect site-specific conditions; or (iii) Other scientifically defensible methods; (2) Establish narrative criteria or criteria based upon biomonitoring methods where numerical criteria cannot be established or to supplement numerical criteria.

The following provides some examples of supporting documentation that may be appropriate for the development of aquatic life or human health criteria:

Supporting documentation for human health criteria should include as necessary:

- Discussion and documentation of the State/Tribal judgment in selecting/modifying any of the factors i.e., cancer potency or systemic toxicity, exposure and risk characterization.
- Basis for the variables contained in EPA's recommended human health methodology that the State/Tribe chose to modify, including, for example, data from fish consumption surveys and discussions of State/Tribe selection of a fish consumption rate and the basis for that rate.
- Presentation and discussion of formulae as well as equations/calculations used in the derivation of the criteria.
- Discussion of any modification/substitution of the IRIS and/or BAF values and risk values used.
- Discussion of the percent of the population the criteria protect.
- Demonstration that the procedures used for developing criteria yield criteria that fully protect the States designated human health uses
- Demonstration that bacterial criteria protect the recreational uses.
- Independent validation: A peer review of experts on key aspects of the above.

Supporting documentation for aquatic life criteria should include as necessary:

- Discussion and scientific basis for the State/Tribe's selection of the ecological community and life stages to be protected, including identification of the most sensitive organisms and/or life stages. This might include a review of any published or unpublished literature, and/or analysis of independent data collection efforts.
- Discussion and analysis of the formulae, calculations, and/or laboratory data used in

the derivation of the criteria.

- Discussion in regards to the totality of the data considered; what was used and what was omitted and why.
- Methodology used to derive the criteria - e.g. did the derivation follow any of the EPA recommended approaches to deriving criteria? Why? Were there any deviations from the methodology? If so why? Were there any inconsistent studies? What is the basis for inclusion or exclusion of inconsistent studies? What is the scientific basis for these changes?
- Demonstration that the procedures used for developing criteria yield fully protective criteria for the most sensitive organisms and life stages of the designated aquatic life use.
- Independent validation: A peer review of experts on key aspects of the above.

40 C.F.R. § 131.6(d) An antidegradation policy consistent with 40 C.F.R. § 131.12.

States/Tribes must develop, adopt and retain an antidegradation policy that applies to all waters and establish procedures for implementing the policy. The policy and implementation procedures must be consistent with the components detailed in 40 C.F.R. § 131.12. The policy must be included in the State's/Tribe's WQS. The implementation methods are not required to be in the State's/Tribe's regulation; they could be contained in a guidance document or elsewhere outside the regulation. Regardless of the location of the implementation methods, EPA will review them to the extent they inform EPA's judgment regarding whether the policy is consistent with 40 C.F.R. § 131.12. If the State/Tribe puts its methods in its WQS regulation, then they are required to submit them to EPA for review and approval under CWA 303(c)(3). If the State/Tribe chooses to develop its methods as guidance or outside of regulation, EPA reviews the methods in connection with the State's/Tribe's submission of an amendment to its antidegradation policy under CWA 303(c)(3). Where a State or Tribe develops methods as guidance or outside regulation but does not make any changes to its antidegradation policy, EPA will review the methods to the extent they inform EPA's judgment about the State's existing policy and, if necessary could exercise its discretionary authority to review existing water quality standards (i.e. the policy) under 303(c)(4). EPA's regulations at 40 C.F.R. § 131.12 do not specify minimum requirements for implementation methods, but the methods must not undermine the intent of the antidegradation policy.

Antidegradation policies and implementation methods are subject to EPA review. EPA will review implementation methods to ensure that methods are included that describe how the State will implement the required elements of the State's antidegradation policy. The implementation methods should include a list of activities/regulatory actions to which a state antidegradation policy applies (i.e., which type of activities are to be regulated under the state antideg policy), or at a minimum, a list of examples of these activities. EPA may disapprove and federally promulgate all or part of a State's antidegradation provisions if, in the judgment of EPA, the methods or certain provisions of the methods can be implemented in such a way as to circumvent or undermine the intent and purpose of the antidegradation policy.

Note: Although antidegradation provisions do not establish any Federal requirements controlling non-point sources, a State/Tribe could chose to apply its antidegradation requirements to non-point sources if State/Tribal law allows regulation of non-point sources. EPA would not review and act upon those provisions under CWA §303(c). EPA has no authority under the Clean Water Act to regulate non-point sources of pollution.

The following are the required elements of an antidegradation policy:

40 C.F.R. § 131.12(a)(1) Protection of existing uses (Tier 1)
Tier 1 establishes the basic level of water quality for all waters of the U.S. While all waters of the U.S. are subject to Tier 1 protection, in general, waters that are subject only to Tier 1 antidegradation policies are those water bodies that do not have the assimilative capacity to receive additional loads of pollutants without causing the loss of the existing use or the water quality is degraded below that necessary to maintain an existing use. "Existing uses" are defined at 40 C.F.R. § 131.3(c) as those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the WQS. Tier 1 is generally implemented through the review and determination of whether a discharge will impair an existing use.

40 C.F.R. § 131.12(a)(2) Protection of high quality waters (Tier 2)
For Tier 2 waters, the Federal antidegradation regulation requires: "In allowing .... degradation of water quality [in such waters] ... the State shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for non-point source control." The requirements at 40 C.F.R. § 131.12(a)(2) ensure that, before additional assimilative capacity of a water body for a pollutant is used, a state must find , after satisfaction of all public participation and intergovernmental coordination, that lowering water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In addition, the state shall assure that prior to allowing lowering of water quality that cost–effective and reasonable best management practices for non-point and required point source controls for that same pollutant have been implemented. EPA interprets this provision to require permitting authorities, where State or Tribes choose to regulate non-point sources, to ensure that non-point source controls are implemented before the State or Tribe may allow a lowering of water quality by point sources.

40 C.F.R. § 131.12(a)(3) Outstanding National Resource Waters (Tier 3)
Tier 3 waters must be maintained and protected. EPA's rules at 40 C.F.R. § 131.12(a)(3) establish this highest level of protection for water bodies by "maintaining and protecting water quality. One common approach to implementing this requirement is to prohibit the lowering of water quality. Thus, the level of water quality present at the time a water body is classified as a Tier 3 water, even that which exceeds the levels necessary to attain

the designated use must be maintained and protected. The only exception to this prohibition is for discharges that result in short-term and temporary changes in water quality.

Although the regulation requires the State or Tribe to provide an ONRW level of protection in their antidegradation policies, there is no requirement that any water body be so designated by a State or Tribe. However, States and Tribes can establish a nomination process with criteria guidelines in which the public could petition the State or Tribe for designation of certain waters as ONRWs; the public should be encouraged to nominate waters into this category. It would then be up to the State or Tribe to set criteria for the ONRW selection process with the final decision made by the State or Tribe after consideration of the public comment.

40 C.F.R. § 131.6(e) Certification by the State Attorney General or other appropriate legal authority within the State that the water quality standards were duly adopted pursuant to State law.

EPA=s review will be initiated after the State's/Tribe's certification that the standards were adopted in accordance with State/Tribal law/rule making procedures. The certification must be submitted with the package. If not, EPA will promptly notify the State/Tribe in writing that it is missing from the submittal. (Please note, the certification is only required at the time of final submission.)

40 C.F.R. § 131.6(f) General information which will aid the Agency in determining the adequacy of the scientific basis of the standards which do not include the uses specified in section 101 (a)(2) of the Act as well as information on general policies applicable to State standards which may affect their application and implementation.

Where States or authorized Tribes adopt uses that are not specified or consistent with those in 101(a)(2) of the CWA, and/or remove a 101(a)(2) use a use attainability analysis (UAA) consistent with the requirements of 40 C.F.R. § 131, including 131.10, must accompany the submission. For example, if a State removes a 101(a) use such as aquatic life or recreation, a UAA must be provided. UAAs may also be required for other situations, such as changes from one 101(a)(2) use to a subcategory of a 101(a)(2) use, with less stringent criteria. States/Tribes must provide EPA with the information to support the designation of these uses as well as the scientific rationale for the associated criteria, as required in 40 C.F.R. § 131.6(c).

This provision also requires States and Tribes to provide EPA with information on general policies such as mixing zones, variance policies, low flows, implementation of such policies, application of standards, and compliance schedules. States and Tribes must submit information describing how these general policies protect designated uses, are scientifically defensible, etc., as appropriate. For submissions which include such

policies, the supporting documentation should include as necessary:

- Implementation procedures applicable to either policies or provisions of the WQS that require additional or more detailed explanation. For example – for a natural conditions provision affecting the state's water quality criteria, additional documentation might be required which would explain implementation of such a provision.
- Documentation of the scientific basis for establishing such provisions including how the provision would provide sufficient protection of water quality and designated uses.
- Definition of terms critical to the understanding of the provision.
- Details that would enhance and add clarity to the provision.
- A discussion of how the provision is consistent with CWA, federal regulations, and/or EPA guidance.

Discussion on Public Participation Requirements

40 C.F.R. § 131.20(b) *Public participation.* The State shall hold a public hearing for the purpose of reviewing water quality standards, in accordance with provisions of State law, EPA's water quality management regulation (40 CFR 130.3(b)(6)) and public participation regulation (40 CFR part 25). The proposed water quality standards revision and supporting analyses shall be made available to the public prior to the hearing.

Per 40 C.F.R. Part 25: 45 days before conducting a hearing, a State must notify the public of the hearing, where to review documents and data, and summarize for the public any major issues. States may notify public only 30 days before a hearing if there are no major issues. If State/Tribal rules require more notice (e.g., 60 days prior to a hearing), those rules must be followed. Generally, EPA recommends that hearings be held in localities that are affected. An opportunity for comment at the hearing must occur. States must keep transcripts and develop summaries of the hearings, and make them available to the public.

In summary, 40 CFR § 131.5(a) sets out the scope of EPA's review of State WQS and provides that the review includes a determination of whether the State has followed its legal procedures for revising or adopting standards. 40 CFR § 131.6 specifies the elements of a State submission for EPA approval and includes an Attorney General certification that the standards were duly adopted pursuant to State law. Section 131.20(b) generally specifies that the State must provide an adequate public process for its revisions to water quality standards.

To that end, EPA's position is that review of the State's public hearing transcripts, public comments submitted to the State, and the State's response to comments, as well as inclusion of these materials in EPA's administrative record, fulfills EPA's responsibilities under the statute and regulations. See Brief of Respondent Carol M. Browner, filed in

City of Albuquerque v. Browner (10th Cir.), at 39. Moreover, one court has held that because of EPA's reliance on the State notice and comment process in formulating its decision, EPA cannot limit its administrative record to what the State submits to EPA but must include in the administrative record public comments sent to EPA or the State that preceded the State submittal. *Ohio Valley Environmental Coalition* v. *Whitman*, 2003 WL 43377 (S.D.W.Va. 2003).

ATTACHMENT A

CONSIDERATIONS FOR USE OF SELECTED 131.10(g) FACTORS

This list of considerations and the brief discussion of application are intended to be illustrative not definitive. It is not necessarily comprehensive.

Factor 1 – Naturally occurring pollutant concentrations prevent the attainment of the use.

Potential Components of Demonstration: water quality assessment for all relevant parameters, biological assessment (as an indicator of water quality), appropriate reference condition for comparison (if available), land usage/watershed characteristics, characterization of point and non-point source pollutant sources upstream of water body, characterization of natural sources, water quality modeling (as necessary to confirm effects from natural pollutant sources), assessment of possible groundwater contamination from human activities as the source of surface water pollutant levels, stream bank stability (including upstream stability if natural siltation is suspected), tidal influences (i.e., for estuarine dissolved oxygen).

Factor 1 may be used in situations where, for example, natural shale deposits cause elevated levels of trace metals or where naturally occurring low dissolved oxygen levels predominate (possibly in conjunction with considerations for factor 1 and factor 5). A "natural condition" is a condition without human-caused changes. Because it is difficult (if not impossible) to find a completely "natural" water body that is free from influence from any human activity, the "natural condition" is typically determined using conditions least affected by human activities as the point of reference, as long as those least affected conditions are believed to be a reasonable approximation of the natural condition. Waters where activities such as urbanization, agricultural practices, hydrologic modification, and atmospheric deposition have a significant measurable or predicted effect on the designated use should not be used as a natural point of reference.

Factor 2 – Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met.

Potential Components of Demonstration: volume and velocity of flow, depth, range of flow conditions (including highs and lows as well as more generally representative conditions not influenced by drought or recent precipitation), presence of pools within the water body channel, precipitation and snowmelt patterns, presence of riparian vegetation (as an indicator of pattern of flow and water levels), depth of water table (to distinguish ephemeral from intermittent if necessary), biological assessment (as necessary to confirm flow or water level limitation if physical evidence is unclear), recreational use safety and access, potential use by children.

Factor 2 is most commonly applied to situations where the ephemeral character of a water

body precludes certain types of aquatic life uses or where low flow conditions that are associated with a depth that is not conducive to swimming predominate. Although there is no formal guidance on what depth precludes recreation, many states have developed protocols that have led to acceptable use refinements (e.g., Colorado, Oklahoma, Kansas). More recently, this factor has been considered relevant for situations where high flows make it unsafe for recreation under certain situations. However, the wording of factor 2 in the regulation only lends itself to application where high flow conditions are natural. The last phrase of the factor ("unless those conditions…") means that the factor is not relevant to situations where a discharger creates permanent flow in an otherwise ephemeral stream or where a discharger creates sufficient depth for recreation in a stream that would otherwise be too shallow.

Factor 3 – Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place.

Potential Components of Demonstration: water quality (and sediment and tissue quality as necessary) assessment for all relevant parameters, biological assessment (as an indicator of water quality), appropriate reference condition for comparison (if available), land usage/watershed characteristics, characterization of human caused condition and its relationship to water quality and/or the use in question, identification of currently available remedies and assessment of their potential efficacy and feasibility, demonstration of application of technology-based requirements and cost effective and reasonable BMPs (as appropriate) or forecast of water quality conditions once implemented (e.g., using water quality modeling), assessment of potential damage caused by potential remedies.

Factor 3 is likely most applicable to watershed scale impacts, where there are a mix of pollutant sources and conditions, and the degree of human activity cannot be reconciled with certain water quality or designated use expectations. Application of this factor is very closely tied to the particular aspects of a given situation and not easily generalized. A good example is removal of contaminated sediment from a harbor that would cause more damage by disruption than the damage caused by leaving it in place.

Factor 4 – Dams, diversions, or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use.

Potential Components of Demonstration: water quality assessment for all relevant parameters, biological assessment (as an indicator of water quality), appropriate reference condition for comparison (if available), land usage/watershed characteristics, characterization of hydrologic modification and its relationship to water quality and/or the use in question, identification of currently available restoration and/or operation methods and assessment of their potential efficacy and feasibility, societal value of the hydrologic modification.

Factor 4 has been used to examine dam operation and consider potential use modifications. The potential applications for this factor are related to those associated with Factor 3. As with factor 3, application of this factor is very closely tied to the particular aspects of a given situation and not easily generalized.

Factor 5 - Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses.

Potential Components of Demonstration: physical habitat characterization of the water body, natural hydrologic patterns, sediment grain size, bathymetry, biological assessment (as necessary to confirm physical habitat limitation if physical evidence is unclear).

Factor 5 is often cited in conjunction with factor 1 and factor 2 for situations where, for example, natural physical conditions contribute to naturally low dissolved oxygen levels. This factor would also be relevant for situations where the natural substrate is not conducive to certain aquatic life uses (e.g., where a high "percent fines" in the sediment and lack of gravel preclude salmonid spawning). Natural physical conditions are also occasionally cited as a contributing factor to situations where human activity has also played a large role in modifying water body conditions (e.g., a combination of factor 3 and factor 5). For example, in a southeastern stream, it was the combination of the effects of urbanization and naturally sluggish hydrology that made attainment of a use infeasible.

Note: The phrase "unrelated to water quality" in Factor 5 does not preclude an examination of water quality. This is particularly important when evaluating a waterbody below a WWTP discharge[1]. A demonstration that the downstream conditions are *natural* may require a quantitative examination of the water quality in the waterbody above and below the WWTP to determine the effects of the discharge on the downstream condition. It is possible that the discharged WWTP effluent could directly impact the available habitat and aquatic life through the exposure of suspended solids, biological oxygen demanding substances, ammonia and other pollutants toxic to aquatic life which could limit the attainability of the use.

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[1] A task of the UAA is to identify receiving water bodies, in which the use(s) is not attained for reasons other than those specified above (natural conditions), that are water quality-limited (impaired) and will require water quality-based controls. Water quality-limited segments are specifically defined by EPA as:

> "...those segments that do not or are not expected to meet applicable water quality standards even after the application of technology-effluent limitations required by sections 301(b) and 306 of the Act."
>
> According to sections 301(b) and 306, technology-based controls include, but are not limited to, "best available technology economically achievable (BAT)" for industrial point sources and secondary treatment for publicly owned treatment work, as well as reasonable and cost-effective BMPs for diffuse sources that have an assurance of being implemented.

Factor 6 - Controls more stringent than those required by sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact

Potential Components of Demonstration: water quality assessment for all relevant parameters, biological assessment (as an indicator of water quality), identification of currently available control technologies and assessment of their potential efficacy, characterization of the costs of controls and their potential for financing over a period of years, characterization of the ability to pay for the affected entities, opportunity costs, evaluation of equity and distribution, environmental justice, identification of the community and characterization of its financial health.

Factor 6 has primarily been applied to single discharger situations where the surrounding community is experiencing economic hardship. It is often used in conjunction with a variance rather than a use removal. EPA's 1995 *Interim Economic Guidance for Water Quality Standards: Workbook* provides guidance on using this factor.